

Exhibit C

IN THE UNITED STATES DISTRICT COURT FOR THE
NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

JUNHONG LU, as Mother and Next
Friend of SHEN HAOCHEN, a minor

Plaintiff,

v.

THE BOEING COMPANY, a corporation,

Defendant.

No. 13-cv-07418

Removed from
Circuit Court of Cook County,
County Department, Law Division
No. 2013 L 010408

This declaration also applies to the
Motions for Reconsideration filed in the
following related cases: Nos.
13-cv-7421, 13-cv-7422, 13-cv-7424,
13-cv-7428, 13-cv-7432, 13-cv-7434

**DECLARATION OF PAUL J. BOLDS-MOOREHEAD IN SUPPORT OF
THE BOEING COMPANY'S MOTION FOR RECONSIDERATION**

I, Paul J. Bolds-Moorehead, declare as follows:

Introduction

1. I am Technical Lead Engineer, 777 and 787-8 Stability & Control for The Boeing Company ("Boeing"). I earned a Bachelor of Science in Aerospace Engineering from Iowa State University in 1985, a Master of Science in Aeronautics & Astronautics from the University of Washington in 1990, and a Master of Science in Project Management from The George Washington University in 2002. I have worked at Boeing since 1985. I have been the Lead Engineer for all 777 Aerodynamics, Stability & Control activities since 1997, and I recently became the 787-8 Stability & Control Lead Engineer. I am also the Boeing Commercial Airplanes Subject Matter Expert for Aerodynamics, Stability & Control Flight Test and Validation. Stability & Control is an aeronautical engineering discipline that deals with airplane flight characteristics, performance, and maneuverability. Based on my experience in Stability & Control, I am able to interpret airplane flight data and draw conclusions about an airplane's flight characteristics and performance.

2. I have reviewed plaintiff's complaint in this action and the complaints in the related cases listed above. I have also reviewed the Memorandum Opinion granting plaintiffs' Motions to Remand. This declaration is offered in support of Boeing's motion for reconsideration of the Memorandum Opinion. I base this declaration on my personal knowledge and on information collected by other Boeing employees. I am competent to testify to my statements in this declaration and would testify about my statements if called to do so.

3. Based on my review of the data, I have concluded that immediately before the airplane impacted the seawall, and while the airplane was entirely over San Francisco Bay, the airplane's speed and altitude were so low that recovery of the airplane was impossible and a crash was inevitable.

The Accident

4. The following information regarding the accident and investigation is publicly available. Because Boeing is assisting the National Transportation Safety Board (the "NTSB") in the ongoing investigation, under 49 C.F.R. § 831.13 Boeing cannot disclose non-public information on the progress and findings of the investigation without the NTSB's consent.

5. The accident airplane was a Boeing 777-200ER. Boeing delivered the airplane to Asiana Airlines on March 7, 2006. At 11:27 a.m. on July 6, 2013, the airplane, operated by Asiana Airlines as Flight 214, hit a seawall short of Runway 28L at San Francisco International Airport ("SFO").

6. Flight 214 originated from Seoul-Incheon Airport in South Korea. The flight lasted about 10 hours and 50 minutes. Nearly all of the flight was over the Pacific Ocean. The

map below created by the NTSB shows Flight 214's approach path to SFO.¹ Flight 214's final approach leg was over San Francisco Bay.



7. The airplane was equipped with a Honeywell Solid State Flight Data Recorder (“FDR”) that recorded airplane flight information. As part of the investigation by the NTSB, the Flight Data Recorder Group (the “FDR Group”) verified about 250 airplane flight information parameters from the FDR and provided those parameters in the FDR Group Chairman’s Factual Report (the “FDR Group Report”), attached as Exhibit A. I have reviewed the data provided in the FDR Group Report, which the NTSB made publicly available on December 11, 2013. This data could not be publicly disclosed or discussed before it was released by the NTSB on that date.

8. The airplane was also equipped with a Honeywell Solid State Cockpit Voice Recorder (“CVR”) that recorded cockpit audio. As part of the NTSB investigation, the Cockpit Voice Recorder Group (the “CVR Group”) prepared a transcript of the cockpit audio recorded during the last 45 minutes of Flight 214 (the “CVR Transcript”). The CVR Group provided the

¹ http://www.nts.gov/investigations/2013/asiana214/photos/130710_1_Flight_Overview1.jpg

CVR Transcript in the CVR Group Chairman's Factual Report (the "CVR Group Report"), attached as Exhibit B. I have reviewed the CVR Group Report, which the NTSB made publicly available on December 11, 2013. The CVR Transcript was not available to Boeing before the December 11, 2013 public release of the CVR Group Report.

9. The CVR Transcript shows that about 17 seconds before the accident airplane hit the seawall, the Instructor Pilot said "it's low," which the Trainee Pilot who was flying the airplane acknowledged. About eight seconds before impact, the Instructor Pilot said "speed." The engine thrust levers were at the idle thrust position and the engines were at idle thrust. The FDR data shows that at about this time one of the pilots moved the engine thrust levers forward from the idle position to the full throttle position. The thrust levers remained in the full throttle position for the remainder of the flight. The engines require time to "spool up" or increase from idle thrust to full thrust. The radio altitude was 95 feet and the airspeed was 111 knots, 26 knots slower than the correct approach speed. The airplane was entirely over San Francisco Bay.

10. About three seconds before impact, the CVR Transcript shows that the Instructor Pilot said "oh # go around." The radio altitude was about 35 feet and the airspeed was 103 knots, 34 knots slower than the correct approach speed. The airplane nose-up pitch attitude was about 12 degrees, the highest pitch value recorded during the last 2.5 minutes of the flight. Engine thrust had increased to about 15 percent of full thrust. The stick shaker warning activated, indicating that the airplane was approaching a stall. The airplane was entirely over San Francisco Bay.

11. About two seconds before impact, the airspeed was 104 knots, 33 knots slower than the correct approach speed. The radio altitude was 24 feet. The pilots both pulled the control columns to the full aft position, which resulted in maximum elevator surface deflection. The pilots pulled with greater than 80 pounds of force in pulling the control columns to the full aft position. The engines were at about 23 percent of full thrust, and thrust continued to increase. The pilots were using all available pitch control and engine control to arrest their descent and avoid contact with the water or ground.

12. Data from the FDR and the CVR Transcript thus show that immediately before the airplane impacted the seawall, and while it remained entirely over San Francisco Bay, the airplane's speed and altitude were so low that recovery of the airplane was impossible. The flight crew attempted to abort the landing and perform a "go-around" to avoid contact with the water or the ground. However, during the final seconds before impact the crash was inevitable because the airplane's airspeed was so slow and altitude was so low that there was nothing further the crew could do to prevent the airplane from hitting the seawall. The airplane was irrecoverable and the crash was inevitable while the airplane was completely over the water.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on December 18, 2013.

Respectfully submitted,



Paul J. Bolds-Moorehead
Technical Lead Engineer
777 and 787-7 Stability & Control
The Boeing Company